and in *Diademodon* for instance. This incidentally lends some support to the idea that the Mammalia have been evolved from two sources, a way of looking at the origin of the group that will coincide with the views of some authors like the late Dr. Mivart, and will at the same time reconcile the trituberculists and the multituberculists. For we should then assume that the Eutheria and Triconodontia had originated from some such form as *OynognatJius;* and the Multituberculata and the existing Monotremes from some form like *Diademodon.* It is not of great use to point out that *Diademodon* is really of the tritubercule pattern, because in its molars, though multituberculate, the trituberculate main cones can be recognised; for that state of affairs could just as well have been brought about by a reduction from the multituberculate type. The skull of these-Theriodonts shows some well-marked approximations to the mammalian type. There is in the first place a commencing consolidation and reduction of the individual bones, which is so distinguishing a feature of the mammalian skull as opposed to the skull of lower vertebrates. In *Cynognathus* the postorbital is fused with the jugal, and the supratemporal with the squamosal, forming apparently one bone. In the lower jaw the splenial is often reduced to the thinness of paper, thus indicating a commencing disappearance. In many Theromorpha the squamosal shares largely in the formation of the articular facet for the lower jaw, obviously an important mammalian characteristic ; this is brought about by the reduction of the quadrate, which latter bone, moreover, acquires in certain particulars the appearance of the mammalian malleus, with which it is, according to many, homologous. But this subject has been already dealt with on page 26. A-very pronounced likeness to the mammalian skull is that there are two occipital condyles. That this has been brought about "by the further development of a tripartite condyle such as occurs in tortoises, and that by the suppression of the basi- occipital part, does not affect the

resemblance to the mammalian skull; in fact it explains the origin of two condyles from the typical reptilian single condyle, and disposes of the necessity for believing, with Huxley and others, the Amphibia to be on the main line of mammalian evolution on account of their two condyles. The general aspect of the skull in *Cynognathus* has been com-